

# UNIVERSITÄTSFORSCHUNGEN ZUR PRÄHISTORISCHEN ARCHÄOLOGIE

Aus der Abteilung für Ur- und Frühgeschichtliche Archäologie  
der Universität Münster

Band 293

## Southeast Europe and Anatolia in prehistory

Essays in honor of Vassil Nikolov  
on his 65th anniversary



edited by  
Krum Bacvarov and Ralf Gleser

2016

VERLAG DR. RUDOLF HABELT GMBH, BONN

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# Universitätsforschungen zur prähistorischen Archäologie

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Verlag Dr. Rudolf Habelt GmbH, Bonn

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Verlag Dr. Rudolf Habelt GmbH, Bonn

Gedruckt mit Unterstützung  
der Alexander von Humboldt Stiftung Bonn und der Westfälischen Wilhelms-Universität Münster

Front cover: White painted anthropomorphic pot from the Neolithic site of Mursalevo,  
Southwest Bulgaria (early 6th mill. BC). © Mursalevo Salvage Excavation Project.

Redaktion: Rashida Hussein-Oglü (Münster), Krum Bacvarov (Sofia)  
Satz: Renate Roling (Münster)

ISBN 978-3-7749-4066-6

Bibliografische Information der Deutschen Nationalbibliothek  
Die Deutsche Nationalbibliothek verzeichnet diese Publikation in der Deutschen Nationalbibliografie;  
detailliertere bibliografische Daten sind im Internet über <http://dnb.dnb.de> abrufbar.

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A stylized, handwritten signature in black ink, consisting of several overlapping loops and a long horizontal stroke at the bottom.

## EDITORIAL

This collection of essays honors Professor Vassil Nikolov on the occasion of his sixty-fifth birthday. A distinguished scholar of southeast European prehistoric archaeology, Vassil has been with the National Institute of Archaeology and Museum of the Bulgarian Academy of Sciences since 1984, after successfully completing his PhD thesis on *The Early Neolithic Pottery Decoration in Bulgaria*, but not before he spent some unemployed time due to his politically incorrect family background. Throughout the years, Vassil went up the steps of the academic career, defended a second doctorate (DSc), *Studies on the Neolithic Pottery in Thrace. The Karanovo II–III, III and III–IV Ceramic Assemblages in Their Northwest Anatolian and Southeast European Context*, in 1998, held the positions of the Director of Museums and Art Galleries Directorate of the Bulgarian Ministry of Culture (1991), Head of the Prehistory Department (1989–1999), Deputy Director (1999–2003) and Director (2003–2007) of the National Institute of Archaeology and Museum, Chairman of the Academic Board of the Institute (2003–2015), Corresponding Member and Member of the Executive Board of the Bulgarian Academy of Sciences (since 2013), all the time teaching prehistoric archaeology at all major Bulgarian universities and widely lecturing abroad, directing national and international excavation and research projects, editing journals and collected volumes, organizing conferences and exhibitions, and even hosting a weekly TV show about Bulgarian archaeological heritage. He has been awarded numerous fellowships and honors, notably Alexander von Humboldt Research Fellowships (first in 1991–1993) and the Order of Merit of the Federal Republic of Germany (2009).

The papers in the volume are contributed by Vassil's friends and colleagues, former and present students, and reflect his wide range of research interests, from the Paleolithic to the Iron Age, from Central Europe to the Near East and beyond. His fascinating way of describing the past to undergraduate students or academia, common public or visiting heads of state, has won him many admirers and friends. His latest excavation projects, at the Early Neolithic site of Slatina-Sofia (where in 2016 he revealed an extraordinarily large house of the early sixth millennium BC) and the Salt-Producing Center of Provadia-Solnitsata (where the last decade has witnessed the uncovering of an amazingly well preserved stone fort and salt-production facilities of the fifth millennium BC), continue to excite the archaeological establishment and the public alike with a wealth of spectacular discoveries that immensely influence current archaeological knowledge and interpretation.

It is with great pleasure that we offer this Festschrift to Vassil Nikolov as a mark of our appreciation to his many contributions to the prehistoric archaeology of Southeast Europe, congratulating him most warmly for his sixty-fifth birthday, and wishing him many more years of good health and productive scholarship!

*Ad multos annos, Magister carissime!*

*Krum Bacvarov and Ralf Gleser  
Sofia and Münster, October 2016*

# AMONG WETLANDS AND LAKES: THE NETWORK OF NEOLITHIC COMMUNITIES IN PELAGONIA AND LAKE OHRID, REPUBLIC OF MACEDONIA

GOCE NAUMOV

## **Abstract**

*For many decades the valley of Pelagonia and Lake Ohrid basin in the Republic of Macedonia were regarded as culturally different regions due to their diverse geographical settings. It was determined that these communities had uncommon identities manifested onto their settlements and items they produced and therefore the regions were regarded as isolated cultural groups in the Neolithic, with Velušina-Porodin (Pelagonia) and Zlastrana (Lake Ohrid basin) belonging to Early Neolithic, and Trn (Pelagonia) and Ustie na Drim (Lake Ohrid basin) specific for the Late Neolithic. Nevertheless, current research indicates that the communities inhabiting these regions established solid networks and shared common identity in regard to wetland environment and farming economy, which was introduced in this area around 6000 BC. Such relationship was initiated in the Early Neolithic and numerous white painted vessels and anthropomorphic house models are in favor of dynamic contacts of the first farmers in Pelagonia and Lake Ohrid basin. The networks were firmly maintained in the Late Neolithic when the communities in these regions synchronically started to produce encrusted black polished pottery and stamps with identical patterns. The communication between these agricultural societies was intertwined on various economic, social and symbolic levels and further archaeological research with implementation of palaeoecological analysis, radiocarbon dating and dendrochronology will determine the wetland setting and the exact age when they initiated and changed their shared identities.*

For more than seven decades the Neolithic in the Republic of Macedonia has been explored with a few major and numerous minor archaeological projects. This research provided basic information on the first farming societies in this region, their villages, subsistence, crafts, economy, rituals etc. Though modest, the results from archaeological excavations and specialized studies demonstrated the cultural features of the communities that had established the first agricultural settlements and their identity manifested through produced items<sup>1</sup>. The identification of a 'culture' was a reference for the culture-historical archaeology in the Balkans and abroad, and led many to identify particular regions with finds unearthed from Neolithic sites. This was a helpful tool for the early stage of prehistoric archaeology in Macedonia and contributed to the understanding of particular regional attributes common for societies inhabiting Ovče Pole, Skopje Plain, Pelagonia and other areas in the Neolithic (fig. 1). However, recent research indicated that these cultural borders and the characteristics of their material cultures are not so rigid and often involve networks beyond the proposed spaceframes. The concept of 'culture' itself has been questioned and often reconsidered on the basis of 'identity' as a more adequate notion concerning the Neolithic societies and their villages, pottery, tools, images, burials, and bodies<sup>2</sup>.

Among these culturally determined regions are Pelagonia and Lake Ohrid basin. Since the first definitions of Neolithic cultures in Macedonia, they were regarded as separated and isolated areas and thus referred to as Velušina-Porodin and Trn groups for Early and Late Neolithic

of Pelagonia, and Zlastrana and Ustie na Drim groups for Early and Late Neolithic in Lake Ohrid basin, respectively<sup>3</sup>. This was a significant step towards the first definition of cultural characteristics of these regions in the 1970's, and as such contributed to the identification of sites into the aforementioned groups. Hence, the reconsideration of published material, museum depots, documentation and new excavations demonstrated that these geographically divided and different regions were not 'culturally' diverse<sup>4</sup>. Though there were indications for the established contacts between Lake Ohrid basin and Pelagonian communities in the Late Neolithic,<sup>5</sup> their constant networks and similarity of material culture since the Early Neolithic were not thoroughly regarded. This paper will therefore consider the common Neolithic characteristics of these isolated regions and the types of networks that integrated shared identities of distant societies.

## **THE GEOGRAPHY OF PELAGONIA AND LAKE OHRID BASIN**

Pelagonia and Lake Ohrid basin are located in the Southeast of the Republic of Macedonia (fig. 1). Although belonging to same broader zone, they are exceptionally different in terms of geography as Pelagonia is an elongated plain, while the Ohrid basin is both hilly and valley area with the biggest lake in Macedonia. They are divided by the basin of Lake Prespa, but due to scarcity of archaeological research it cannot be confirmed whether this region shared the same material culture. Besides Lake Prespa, these two regions

1 Garašanin 1979; Sanev 1995.

2 Naumov 2010; 2015.

3 Garašanin 1979; Sanev 1994.

4 Naumov 2016.

5 Benac 1989.



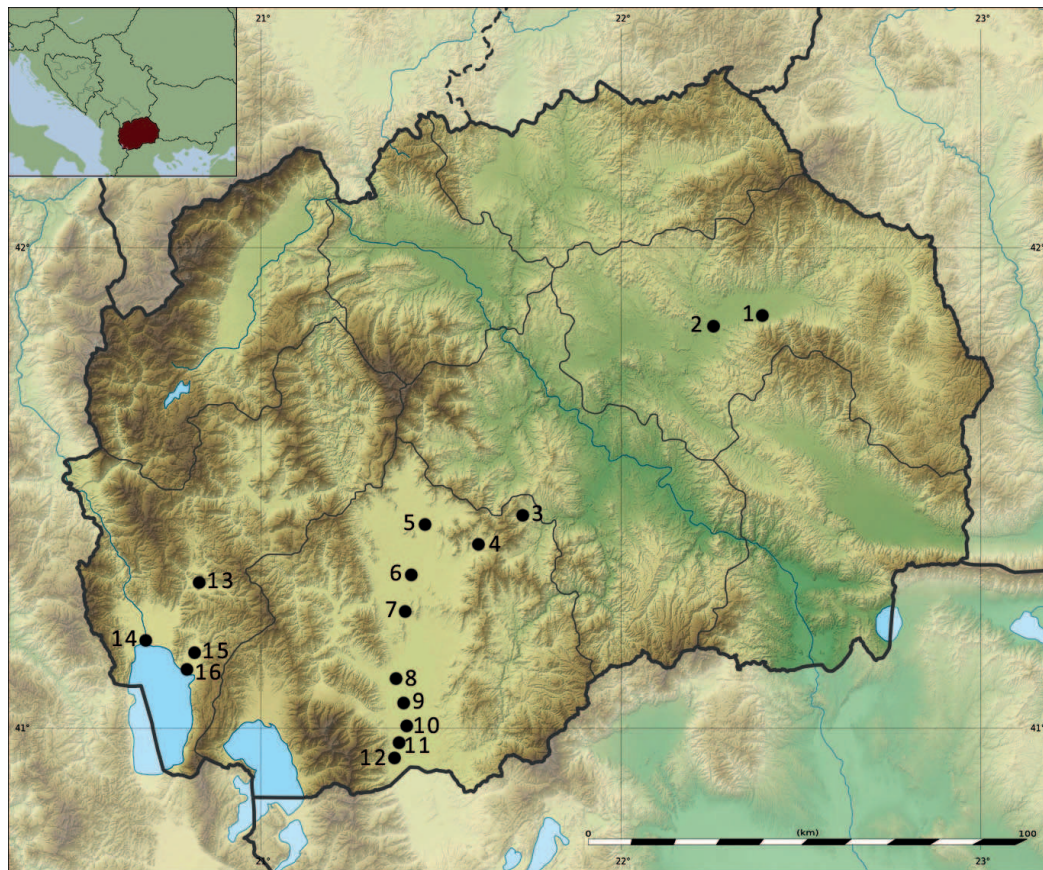


Fig. 1: Map of the Republic of Macedonia showing the location of sites discussed in the paper, within the regions of Ovče Pole (1–2), Pelagonia (3–12), and Lake Ohrid basin (13–16).

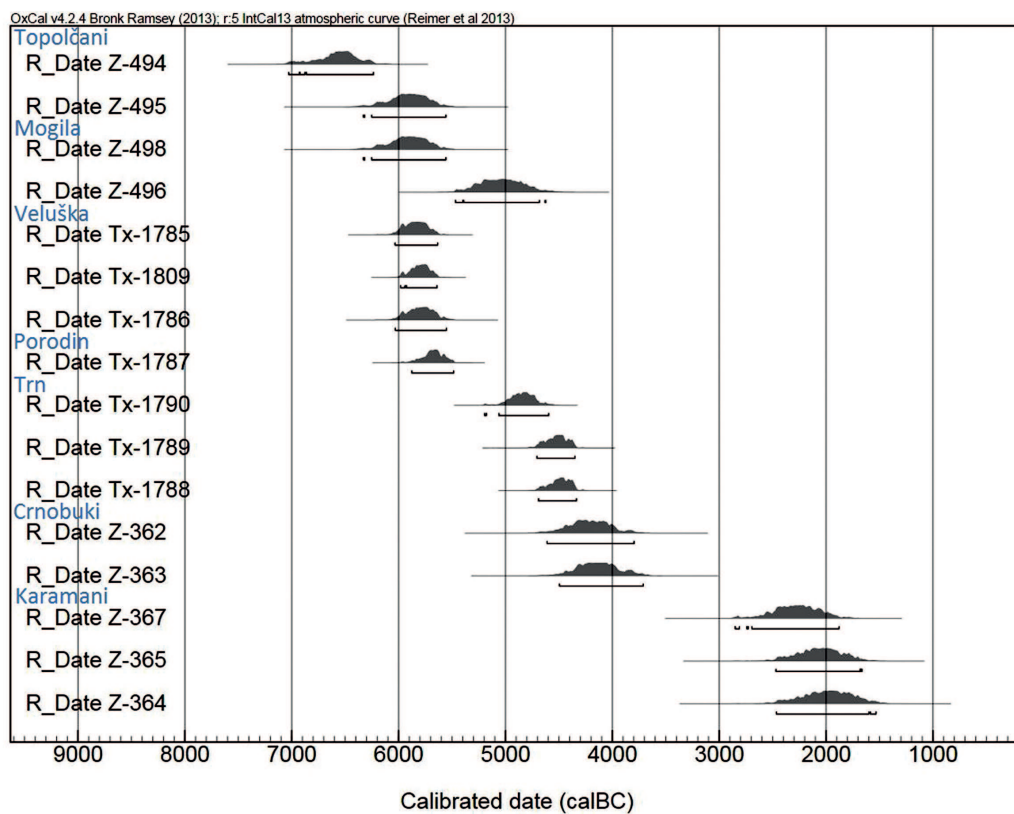


Fig. 2: Calibrated radiocarbon dates for the prehistoric tell sites in Pelagonia (after Naumov, in press).

are also divided by several high mountain ranges which disrupt comfort communication, such as Baba, Galičica, and Istok. Considering the high ranges, the communication between Pelagonia, Prespa and Lake Ohrid in the past was performed most likely through the same routes that are used today, i.e., the corridor between Baba and Bigla Mountains, Gjavato Pass, the corridor between Istok and Galičica Mountains, as well as the route from Leskoc to Trpejca in the Galičica Mountains. Other routes could have been used in the Neolithic as well, but those listed above provide the most effective communication between Pelagonia and Lake Ohrid.

### Pelagonia

Pelagonia is the biggest valley in the Republic of Macedonia and its southern part borders with Greece. It is an elongated, north-south oriented plain, with an approximate length of 80 km, occupation area of 4000 km<sup>2</sup> and elevation of 650 m. It is surrounded by several mountains (Baba, Buševa, Dautica, Babuna, Selečka, Nidje, and Neredska) and a few rivers flow within (Crna Reka and its confluent Dragor, Šemnica, and Eleška)<sup>6</sup>. In the tertiary period, Pelagonia was occupied by lakes, and hence the abundance of alluvial terrain. Due to alluvial deposits, snow melting from surrounding mountains, and frequent river flooding in the central part, the plain had several marshy lakes, which were drained in the 1960's. The fertile soils have attracted farmers since the Early Neolithic, when first agricultural societies established their settlements commonly referred to as tells.

The climate of Pelagonia is modified continental and moderate continental, with hot and dry summers, and cold and wet winters. Large temperature fluctuations are frequent, with maximum of 40 °C in the summer to minimum of -30 °C in the winter. The average precipitation is approximately 915 mm per year, which, along with river floodings, allows a constant watering of the soil and successful cultivation of cereals<sup>7</sup>. This was an adequate environment for the Neolithic settlers to establish agricultural communities and to preserve cereal based economy for many generations. There is not much done in terms of research on life prior to Neolithic, so that it cannot be confirmed whether this plain was inhabited in the Palaeolithic. The few Palaeolithic tools found on the surface suggest the possibility of hunter-gatherer nomads to have resided in this area,<sup>8</sup> but the lack of excavations at Palaeolithic and Mesolithic sites prevent solving the issue.

### Lake Ohrid basin

The region of Ohrid consists of several mountain ranges, an alluvial plain and a large lake. Lake Ohrid is the biggest lake in the Republic of Macedonia, with a surface area of

358 km<sup>2</sup> and 289 m maximum depth. It is considered as the oldest lake in Europe inhabited by numerous endemic species dating back to the Pliocene. The lake's altitude is 693 m (a.s.l.); it is enclosed by the Galičica and Jablanica Mountains to the east and west, while the rivers Crni Drim, Sateska, and Koselska flow in the alluvial valley to the north<sup>9</sup>. Lake Ohrid is 30 km long and 15 km wide, and borders with Albania to the southwest. The climate in the basin is considered as local-continental with maximum of 35 °C in the summer to minimum -17 °C in the winter, while the average precipitation is approximately 759 mm per year.

The distinct biodiversity and lively landscapes made Lake Ohrid basin a preferred region for living where significant prehistoric, classical and medieval settlements were founded. Particular locations have been suggested as potential Palaeolithic sites, although the earliest settlements are dated to the Neolithic<sup>10</sup>. The fertile alluvial plain and rich lake attracted various communities and as result some settlements become urban and trade centers in prehistoric and classical times when contacts with distant societies were established, some of them even bearing African features<sup>11</sup>. Lake Ohrid basin was an attractive and dynamic area since the Early Neolithic when intensive communication with the regions of Pelagonia and Korça is evidenced. It remains to be discussed which was the direction of influences and whether there was a mutual exchange of local manifestations within material culture, architecture and social life. This is one of the questions that will be addressed in this paper and several explanations will be proposed in regard to the solid networks established between Lake Ohrid and Pelagonia in the Early and Late Neolithic.

### EARLY NEOLITHIC NETWORKS

Prior to any identification of the types of Neolithic networks between Pelagonia and Ohrid region, a general introduction to the Neolithic in Macedonia is necessary. There are several theories about how the first agricultural societies were established in this region, but most of the authors agree that it was a rapid and intensive process<sup>12</sup>. The direction of neolithization is still discussed, with some proposing settling along main rivers, especially Vardar<sup>13</sup>, and others arguing that Pelagonia was the first region settled by the farming communities<sup>14</sup>. For the moment, the geographical and chronological evidence doesn't suggest that Pelagonia was a suitable area for agricultural societies in the initial Neolithic stages. The high mountains, density of smaller lakes and heavy floods did not provide an easy access to Pelagonia from Thessaly in the second half of

6 Trifunovski 1998.

7 Puteska et al. 2015.

8 Malez 1979; Kuzman 1995.

9 Trifunovski 1992; Albrecht / Wilke 2008; Hoffmann et al. 2010; Wagner et al. 2014.

10 Kuzman 1993; 1995.

11 Chausidis 2009.

12 Gimbutas 1974; Garašanin 1979; Sanev 1995; Naumov 2009a.

13 Gimbutas 1976; Sanev 1994; Naumov 2015.

14 Zdravkovski 2006.

the 7<sup>th</sup> millennium BC<sup>15</sup>. While many communities around 6200 BC were inhabiting locations on the plains close to the rivers Vardar and Bistrica (e.g., Nea Nikomedea, Giannitsa, Paliambela), in Pelagonia there is an absence of sites in this period, except for several questionable radiocarbon dates. Even the earliest dates from Amzabegovo (east of the river Vardar) are closer to those from Nea Nikomedea and Giannitsa, than to the dates from Pelagonia<sup>16</sup>. The issue of the absolute dating requires more detailed elaboration of Pelagonian context and the initial Neolithic stages in this region.

### Pelagonia

Although the first and only radiocarbon dates from Pelagonia were provided in the 1970's and 1980's, they were neglected by archaeologists for several decades<sup>17</sup>. The calibrated dates from the Neolithic sites in Pelagonia were a significant step forward in understanding the neolithisation of this area, and thus a new chronological perspective was presented<sup>18</sup>. The revised dates indicate that the first agricultural societies inhabited this plain around 6000 BC (fig. 2), although some dates offer much earlier occupation<sup>19</sup>. The accuracy of these early dates with a high deviation is still under discussion, and therefore new analysis is necessary in order to determine whether there was occupation in Pelagonia several centuries prior to 6000 BC. Available calibrated dates show the tell sites of Porodin, Mogila, and Topolčani as the earliest in the area and they entirely fit into the designated features of the so called Velušina-Porodin group.

In the earliest levels of these tell sites white painted pottery appears, along with wattle and daub houses, figurines, 'altars', stone and bone tools, while the anthropomorphic house models appear in the next stage of settlement development<sup>20</sup>. The particular white painted patterns, 'altars', figurines and anthropomorphic houses are distinct Pelagonian features and were incorporated within the notion of identity of communities inhabiting this geographically enclosed area<sup>21</sup>. These patterns, specific hybrid representations or miniature architectonic details are absent in other regions of Macedonia or were significantly modified in the process of modest contacts with other communities (fig. 3). Lake Ohrid basin is one of the rare areas where such Pelagonian features were apparently preserved and exchanged or produced in similar fashion. Therefore, these traits require further archaeological attention as they were neglected or minimized previously.

### Lake Ohrid basin

The beginning of the Neolithic in Ohrid area is not yet chronologically determined through radiocarbon dates. There are discussions on its initial stages in regard to the character of the first agricultural settlements. It has been suggested that the site of Zlastrana is the earliest because of the modest coarse ware and potential pit houses<sup>22</sup>. In this case, the same conclusion as the one concerning the site of Pešterica in Pelagonia has been followed, i.e., the coarser ware or simpler dwellings (pit houses) means earlier sites<sup>23</sup>. Unless chronologically dated, the debates on these sites cannot be taken as conclusive as they could belong to camps or isolated communities that preserved an Early Neolithic lifestyle in much later times than the initial Neolithic stages. It should be noted as well that these sites are located in higher remote areas of mountainous landscape far from the alluvial plains that were adequate for first impact of new societies and for solid provision of subsistence close to the rivers and the lake.

One such settlement is the site of Dolno Trnovo, which is located on the alluvial flat terrain in the northeastern suburbs of the city of Ohrid. The excavations at this site yielded wattle and daub houses, white painted pottery, 'altars', and anthropomorphic house models<sup>24</sup>. They are almost identical to those produced in Pelagonia, which confirms the identified communication between both regions (fig. 4). The similarities within material culture and architecture could indicate simultaneous occupation of the sites in these geographically divided regions, although radiocarbon dating is necessary in order to propose a more thorough elaboration on the issue. In this case it should be emphasized that the ceramic assemblage from Dolno Trnovo partially resembles the one unearthed at the Early Neolithic sites in the Korça basin located in the vicinity of the now dried Lake Maliq. The sites of Podgorie, Sovjan, and Vashtëmi are situated only a few kilometers south of Lake Ohrid,<sup>25</sup> and the communication with them was easier as there are no high mountain ranges in between as those on the way to Pelagonia. The Early Neolithic pottery of Pelagonia, although apparently distinctive, also has some similarities to the one from the Korça basin, Thessaly and the plains northwest and west of Thessaloniki. Therefore, further discussion on influence directions is needed in order to understand the exchange system and shared identities at least on a local level.

### Characteristics of the Early Neolithic networks

The archaeological material apparently indicates that there was an established network between Pelagonia and Lake Ohrid basin. In regard to broader communication,

15 Kitanoski et al. 1980; Naumov 2009a.

16 Gimbutas 1976; Whittle et al. 2005; Reingruber / Thissen 2005.

17 Srdoč et al. 1977; Valastro et al. 1977; Pazdur 1990.

18 Thissen 2000; Whittle et al. 2005; Naumov 2009a.

19 Naumov, in press.

20 Grbić et al. 1960; Simoska / Sanev 1975; Simoska et al. 1979;

Kitanoski et al. 1978; Mitkoski 2005; Naumov / Tomaž 2015.

21 Naumov 2010; 2015.

22 Kuzman 1990.

23 Kitanoski et al. 1980.

24 Kuzman et al. 1989; Naumov / Chausidis 2011.

25 Ruzi 2009; Bunguri 2014.





Fig. 3: Early Neolithic pottery, figurines, and house models from 'Tumba' and 'Veluška Tumba' at Porodin in Pelagonia: (1) height 48 cm (Fidanoski 2009, pl. 66/7); (2) width 23 cm (Fidanoski 2009, pl. 66/5); (3) height 17 cm (Fidanoski 2009, pl. 67/3); (4) height 7 cm (Kolištrkoska Nasteva 2005, fig. 7); (5) height 12 cm (Kolištrkoska Nasteva 2005, fig. 26); (6) height 6 cm (Kolištrkoska Nasteva 2005, fig. 5); (7) no scale (Vasileva 2005, 40); (8) height 25 cm (Kolištrkoska Nasteva 2005, fig. 43); (9) no scale (Vasileva 2005, 40).

it should be noted that the pottery from these regions resembles ceramic assemblages from Greece (Nea Nikomedeia, Giannitsa, and Mavropigi) and Albania (Podgorie and Vashtëmi), but significantly differs in terms of painted compositional structures<sup>26</sup>. Particular painted patterns from Veluška Tumba or Mogila (Pelagonia) and Dolno Trnovo (Lake Ohrid basin) are similar to those from the aforementioned sites, but the manner of their combination within the compositional structure of vessels is considerably different. This suggests that contacts and influences from the south are distinctive, but during the process of communication or occupation of new areas, such as Pelagonia and Lake Ohrid, the farming communities established a new identity, which was partially manifested onto pottery design and other elements of material cul-

ture. It still cannot be determined whether the influences, exchange or demographic movements to Pelagonia and Lake Ohrid were coming from the Giannitsa – Nea Nikomedeia – Rizari (southwestern direction) or from Serbia – Vrysi – Mavropigi (southern direction) (fig. 5). The pottery from Mavropigi shares significant similarities with the one produced at the Early Neolithic sites in the Korça basin<sup>27</sup>, while its polychrome surface and compositional designs are entirely absent from vessels in Lake Ohrid basin or Pelagonia. The southwestern route of neolithisation seems more adequate as there is chronological closeness with the sites in Pelagonia,<sup>28</sup> but still the pottery in this region lacks many distinctive painted patterns known from the settlements of Nea Nikomedeia and Giannitsa.

26 Naumov 2010.

27 Karamitrou-Mentessidi et al. 2013.

28 Naumov, in press.





Fig. 4: Unpublished Early Neolithic white painted pottery and anthropomorphic house model fragments from Dolno Trnovo, Lake Ohrid basin (photos by Ljubo Fidanoski): (1) width 4 cm; (2) height 6 cm; (3) width 5 cm; (4) height 3 cm; (5) width 4 cm; (6) width 5 cm; (7) height 6 cm; (8) width 9 cm; (9) width 11 cm.

In this regard, it is hard to conclude how the Neolithic networks were initiated in Pelagonia and Lake Ohrid. However, it is obvious that they established an idiosyncratic identity as witnessed by pottery and especially by anthropomorphic house models, which are absent at such sites as Podgorie, Vashtëmi, Mavropigi, Giannitsa, and Nea Nikomedeia. Without dendrochronological or radiocarbon dates from Lake Ohrid basin and new AMS dates from Pelagonia, the beginning and direction of neolithisation cannot be precisely determined<sup>29</sup>. This also considers the mutual networks of sites in the Pelagonian plain and Lake Ohrid basin and the question of initial influence or trade. Nevertheless, in regard to this issue material culture has a significant role as it could indicate probable centers of impact. The pottery, figurines, anthropomorphic house models, and 'altars' demonstrate various local values and skills in lack of accurate evidence and knowledge on the resources Neolithic communities used for production of ceramic or stone objects.

Considering the comparison of material culture from these regions, one should take into account also the scale of research, as there are only two Early Neolithic sites

excavated in Ohrid area vs. approximately ten contemporary settlements explored in Pelagonia. The abundance of archaeological material is suggestive of the technological advantages of particular communities, but the probability of scarcity of sites in a region should not be ignored. It can easily be argued that Pelagonian societies had a significant impact onto those in Ohrid area, especially if pottery and anthropomorphic house models are considered, but without any further thorough study of finds and radiocarbon dates from particular sites in both regions, such a conclusion could fail to contribute to the understanding of Early Neolithic networks. Nevertheless, the available archaeological evidence at least confirms the contacts between two regions geographically divided by high and massive mountains, which were disregarded previously by the archaeologists as the obstacle in intensive communication among early agriculturists inhabiting flat plains<sup>30</sup>. The unearthed finds from these regions demonstrate resemblance not only between categories of objects and typology, but also on the level of details, such as white painted triangles, lozenges and elongated lines on pottery or knobs and openings on the anthropomorphic house models (figs. 3–4). These similarities along with those to be further considered on other objects indicate the existence of close networks between farming communities in Pelagonia and Ohrid area that are not that much distinctive in their interaction with societies residing in other regions.

#### LATE NEOLITHIC NETWORKS

The beginning of the Late Neolithic in Pelagonia and Lake Ohrid basin is still obscure as there is almost no evidence on the Middle Neolithic in these areas. Particular levels of Veluška Tumba were considered as Early Neolithic during the excavations, but later the general chronological frame for Velušina-Porodin group was redefined and adjusted to one previously established for Amzabegovo-Vršnik group<sup>31</sup>. This rather artificial chronology of Pelagonian Neolithic was not based on a thorough data analysis and distinctiveness of significant changes, but merely on particular visual features of pottery that appear at various stratigraphical levels of tell sites. A similar approach was taken for the site of Trn, which was first described as Middle Neolithic and later attributed to the Late Neolithic<sup>32</sup>. Little can be said for the initial stage of the Late Neolithic due to the lack of solid arguments and archaeological material for the determination of the Middle Neolithic in Pelagonia and Ohrid area. Nevertheless, the developed Late Neolithic is apparently manifested through material culture and thus the networks between these regions can be discussed.

29 Recent dendrochronological analysis on posts from Ohridati yielded the dates 5891 and 5511 CalBC, i.e., the end of Early Neolithic and developed Middle Neolithic (Westphal et al. 2010). These dates suggest much earlier phases than those proposed before based on consideration of material culture, although some of the finds are common to the Early and Middle Neolithic of Pelagonia. Seeds from Porodin and Optičari were recently 14C dated at the University of Bern and the results confirm Pelagonian chronology based on 1970's dates, i.e., both sites were most likely founded at the very beginning of the 6 millennium BC.

30 Garašanin 1979.

31 Simoska / Sanev 1975; Sanev 1995.

32 Simoska / Sanev 1977; Benac 1979; 1989; Sanev 1995.



Fig. 5: Map of the Balkans showing the region of Pelagonia and two probable directions of its neolithisation.

### Pelagonia

The site of Trn could be an appropriate introduction to the Late Neolithic of Pelagonia. After the revisiting of unearthed finds this site was defined as Late Neolithic due to evident features of the ceramic assemblage<sup>33</sup>. The typology of vessels and incised and encrusted decoration resemble contemporary sites in the Balkans (fig. 6); the excavated site of Senokos in Pelagonia also contributed to the clear identification of Trn as Late Neolithic<sup>34</sup>. As the first site that yielded finds diagnostic for the Pelagonian later Neolithic, it was considered as eponymous and thus the Trn cultural group was formulated<sup>35</sup>. There are even radiocarbon dates from Trn, which were not considered in Macedonian archaeology until recent calibration<sup>36</sup>. These suggest that life at the tell started at the very beginning of the 5<sup>th</sup> millennium BC (fig. 2), though the excavation reports assign the initial levels to the earlier phases of Pelagonian Neolithic whose material was unfortunately never published<sup>37</sup>.

Although consisting of, currently, only three sites (Trn, Rakle, and Senokos), the so-called Trn cultural group has a distinctive material culture that is not common in the eastern and northern regions of Macedonia. Vessel types and

especially their fabric, temper and decoration significantly differ from the pottery production at other excavated sites in Pelagonia and understandingly from the earlier ceramic assemblages. The incised triangles with nets organized in rows, dotted triangles or stripes and the introduction of *rhya* containers are the most distinguishable features of this area in the Late Neolithic (fig. 6). In this period, the unique and representative Pelagonian anthropomorphic house models are entirely absent, although they were quite common among the earlier Neolithic farming communities. These groups continued their life on tells, but apparently changed their household, material agency and most likely the demography. In comparison to the Early Neolithic, the number of Late Neolithic tells decreased and the settlements obviously moved to higher elevations, although tells were used as residential setting in the Chalcolithic and Bronze Age as well<sup>38</sup>. In spite of these changes, the Late Neolithic communities maintained the communication with the societies in Lake Ohrid basin and shared many common features in terms of pottery, tools, and human representations.

### Lake Ohrid basin

The issue of the absence of the Middle Neolithic and the transition to the Late Neolithic also concerns the Ohrid area. No excavated or surveyed sites demonstrate the Middle Neolithic characteristics known from the neighboring

33 Sanev 1994.

34 Temelkoski / Mitkoski 2006.

35 Garašanin 1979; Sanev 1994.

36 Valastro et al. 1977; Naumov, in press.

37 Simoska / Sanev 1977.

38 Simoska / Sanev 1976; Naumov et al. 2014.



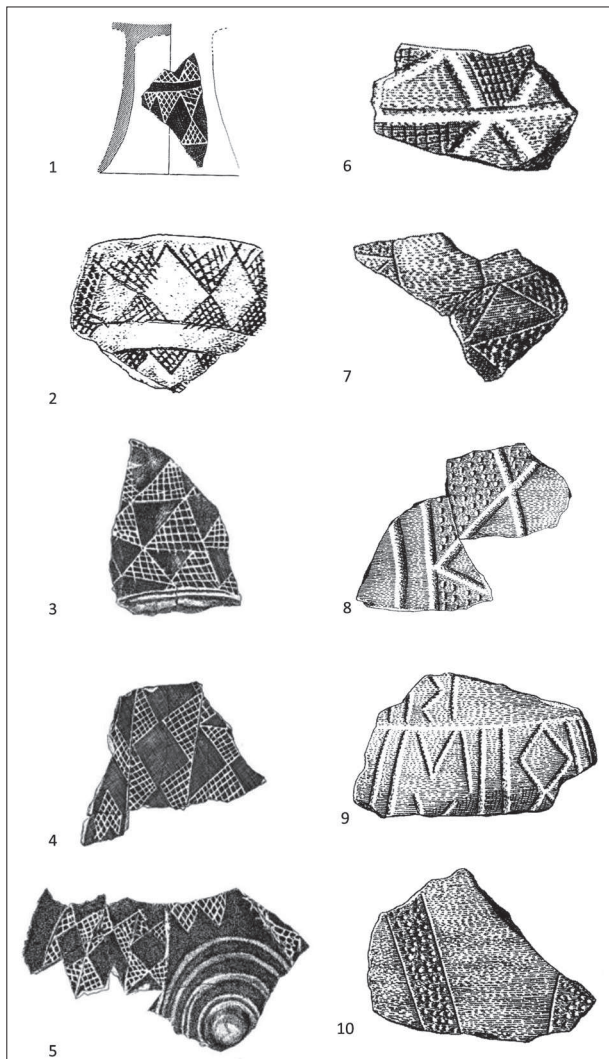


Fig. 6: Late Neolithic ceramic sherds from the tell sites of Trn (1–5: Simoska / Sanev 1977, T. I–II) and Senokos (6–10: Temelkoski / Mitkoski 2006, T. II, V) in Pelagonia: (1) height 6 cm; (2) width 8 cm; (3) height 10 cm; (4) width 11 cm; (5) width 17 cm; (6) width 7 cm; (7) width 7 cm; (8) width 13 cm; (9) width 12 cm; (10) width 10 cm.

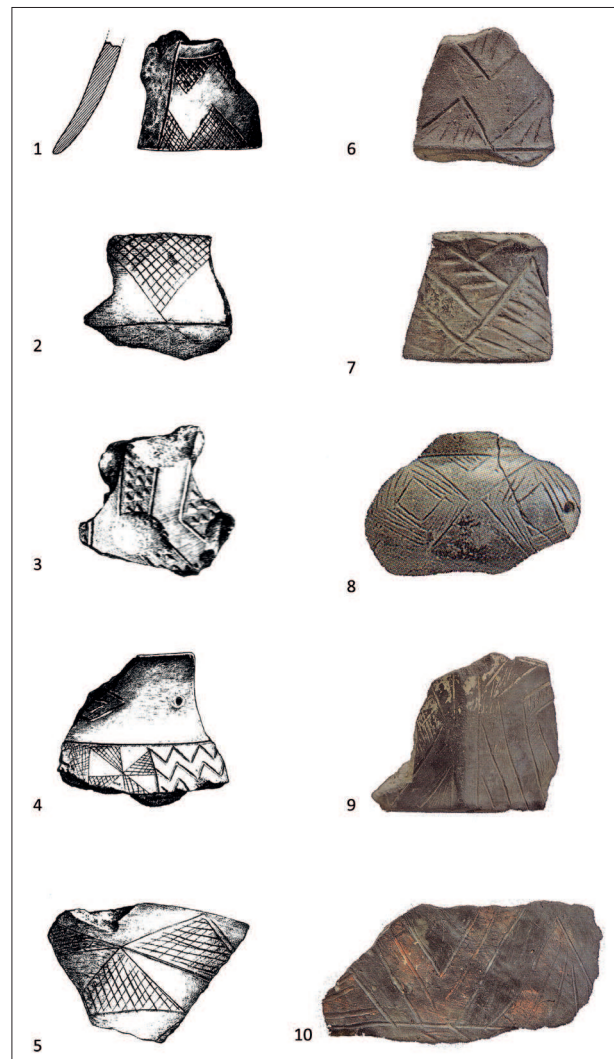


Fig. 7: Late Neolithic ceramic sherds from Ustie na Drim (1–5: Benac 1979, T. LXXI) and Ohridati (Kuzman 2013, T. I–II) in Lake Ohrid basin: (1) height 8 cm; (2) height 7 cm; (3) height 10 cm; (4) height 12 cm; (5) width 13 cm; (6) height 6 cm; (7) height 5 cm; (8) width 7 cm; (9) height 9 cm; (10) height 13 cm.

regions, and it is therefore hard to elaborate whether there was a gradual or rapid turn from one phase to another. Nevertheless, the Late Neolithic in the area is fully developed and apparently different from earlier periods. There are only two sites excavated which reveal the life and material culture. Both of them are within the modern cities of Struga (referred to as Ustie na Drim) and Ohrid (popularized as Penelopa or Ohridati), but the modest excavations provided evidence on settlement life that was then unknown in Macedonian archaeology<sup>39</sup>. They are both pile dwellings situated on the lakeshore and were occupied by communities mainly focused – for obvious reasons – on

fishing. These sites have been reconsidered on the basis of latest research and new insights have been offered into their economy and networks<sup>40</sup>.

Bone harpoons, spears, and fishhooks make up the majority of the small finds recovered from Ustie na Drim and Ohridati, which has never happened at other Neolithic sites in Macedonia. Occupation of lakeshores reasonably suggests practicing fishing economy, but the quantity and variety of such tools is remarkable. The same is valid for the pottery production as many new shape types and significant innovations in fabric and decoration appeared. Encrusted incisions with netted triangles and dotted stripes are espe-

39 Garašanin et al. 1971; Sanev et al. 1976; Benac 1979; Kuzman 2009.

40 Kuzman 2013; Naumov 2016; Todoroska, in press.

cially diagnostic of the Late Neolithic ceramic assemblages (fig. 7). Both Ustie na Drim and Ohridati have yielded polished vessels with the dotted stripes shaped in meanders, which is an emblematic feature of the Vinča pottery. This area can be thus regarded as the most southwestern range of Vinča culture, but the issue of the Late Neolithic networks and the so-called cultures will be questioned and discussed below.

The characteristics of Ohrid area in the last Neolithic stage also include anthropomorphic house models. An anthropomorphic cylinder with apparent Pelagonian features was unearthed at Ohridati, which indicates not only the contacts with that remote area (fig. 8), but also the preservation of a symbolic tradition that disappeared at the contemporary Late Neolithic sites in Pelagonia<sup>41</sup>. Apart from this specific cultural phenomenon, the other human representations, stamps and pottery design also demonstrate the evident communication with Pelagonian communities and suggest the existence of a network on the level of economy, identity, and symbolic processes.

### Characteristics of the Late Neolithic networks

As pointed out above, the absence of Middle Neolithic remains in Lake Ohrid basin hinders the debate on the initial stages of the Late Neolithic in this area and whether it was a gradual or rapid process. The anthropomorphic cylinder from Ohridati partially contributes to this discussion as it obviously indicates the preserved Early Neolithic traditions in Ohrid area where such models were produced as well. Nevertheless, this is one of the few artifact types that suggest a preservation of local practices, as many new elements appeared in the Late Neolithic indicating transition to new lifeways, intensified exchange with other regions or even an influx of new population, which transformed the social, economic, and architectural setting. Apart from the pottery changes, settlement pattern is another evidence of new practices. The first pile dwellings in Lake Ohrid basin appeared in the Late Neolithic and their architecture significantly differs from the earlier Neolithic phases<sup>42</sup>. Such dwellings might have been built before that, too, but due to the small scale of archaeological research it remains unknown whether the lakeshores were settled in the Early Neolithic. But if other pile dwellings in the neighboring regions are considered, it can be concluded that most of them were established in the Late Neolithic and rarely in the Middle Neolithic as is demonstrated by the palafittes at Maliq, Dispilio, Anaghiri, and Limnochori<sup>43</sup>.

As pottery remains the main indicator of social changes in the Balkan prehistory, it can be used for the definition of



Fig. 8: Neolithic anthropomorphic cylinders from house models: (1) Ohridati (height 24 cm; Kuzman 2013, T. IV/7); (2) Gurgur Tumba (height 17 cm; Simoska / Sanev 1976, 42, fig. 144).

the Late Neolithic in Ohrid area and for the identification of interregional networks. As discussed above, the vessels are entirely different from the ceramic assemblages of the preceding Neolithic stages and share common elements with several regions, some of which are quite remote. The black polished carinated ware decorated with channeling was often regarded as a Late Neolithic feature, but at many sites in Macedonia and especially in Pelagonia such pottery was also recovered from Early and Middle Neolithic levels<sup>44</sup>. It is more abundant in the Late Neolithic of Ohrid area, but it cannot be considered as the main attribute of this phase. The most distinctive ceramic elements in this period are the netted incised triangles and dotted stripes that are often present on vessels in Pelagonia as well, but also at many other sites of the Vinča and Danilo cultures in the Balkans. Thus, some authors consider Ustie na Drim and Trn within the network of settlements in the Adriatic, i.e., Danilo cultural group<sup>45</sup>. This was an attractive idea in Yugoslavian archaeology that was largely accepted as most of the Neolithic sites in Macedonia were regarded as conservative peripheries of major cultures such as Starčevo, Vinča, and Danilo<sup>46</sup>. Due to such political framework of Neolithic societies, many other directions and types of networks were neglected.

Consequently, the incised triangles and spiral meanders were regarded as major features of Danilo group, while dotted stripes and angled meanders were the 'trade mark' of Vinča culture. But the extensive research on the Late Neolithic and Early Chalcolithic sites in Turkey provided entirely new understanding of communication between Anatolian and Balkan societies. These distinctive pottery features of Danilo and Vinča groups appeared much earlier in Central Anatolia and Eastern Turkey; therefore,

41 Naumov 2009b.

42 Naumov 2016.

43 Fouache et al. 2010; Facorellis et al. 2014; Chrysostomou et al. 2015.

44 Fidanoski 2009; Naumov 2009b.

45 Benac 1979; 1989.

46 Garašanin 1989.

westward influences in the Late Neolithic have been suggested instead of those previously elaborated<sup>47</sup>. The Late Neolithic levels at Koşk Höyük, Çatalhöyük and Tepecik Çiflik in Anatolia, as well as many sites in the Marmara basin (Fikirtepe, Yarimburgaz, Yenikapi, Toptepe, etc.) yielded pottery decorated with incised netted triangles, dotted stripes and wavy or angled meanders<sup>48</sup>. These ceramic traits were introduced into the Balkans through the regions of Thrace and West Macedonia and thus shared with the communities in Pelagonia and Ohrid area in the late 6<sup>th</sup> and early 5<sup>th</sup> millennium BC. This should be further supported by new research, thorough analysis of ceramics, and chronological consideration, but the alternative directions of Late Neolithic contacts and networks are apparent.

It remains to be answered how the Late Neolithic features were integrated into the communities inhabiting Lake Ohrid basin and Pelagonia. The resemblance of incised and dotted pottery patterns with many Late Neolithic sites in Bulgaria, Greece and Albania indicates the incorporation of these elements into Pelagonia and Ohrid area from the southeast. It is questionable whether these traits were further spread westwards to the Adriatic or indeed Pelagonia and Lake Ohrid basin remained as areas of cultural mixtures as previously proposed<sup>49</sup>. Nevertheless, the pottery and stamps undoubtedly demonstrate the intensive contacts existing between the communities of Trn, Senokos, Ustie na Drim, and Ohridati. Due to the subsistence resources in both regions, economic exchange was established and most likely identity features were shared as manifested by the pottery and stamp design<sup>50</sup>. It should be stressed that this network was initiated in the Early Neolithic when the first farmers in Pelagonia and Ohrid area launched mutual communication on various levels. The question arises whether this early network disintegrated and was re-established in the Late Neolithic by the same local communities or an entirely new population introduced it as a much larger regional network? Future research based on thorough pottery documentation, chronological analysis, and more detailed excavations could contribute to the understanding of this complex social process common for the Early and Late Neolithic communities of Pelagonia and Lake Ohrid basin.

## CONCLUSION

The revisit of material excavated in the 1960's and 1970's and the consideration of new evidence from Pelagonia and Ohrid area provide a novel understanding of the term 'archaeological culture' and its borders. These different regions were artificially divided by archaeologists into two Neolithic cultural groups due to the geographical remoteness and diverse environmental settings, i.e., flat plain *versus* lake basin. But the archaeological material from the Early and Late Neolithic sites indicates that these regions continually shared many common features in spite of environmental differences. The same Early Neolithic pottery, figurines and anthropomorphic house models were unearthed at the tell sites of Porodin, Mogila, Optičari, Slavej, and Topolčani in Pelagonia, and Dolno Trnovo in Lake Ohrid basin. The same issue concerns the Late Neolithic pottery and stamps at the sites of Trn and Senokos in Pelagonia, and Ustie na Drim and Ohridati in Ohrid area. The concept of the so-called cultural groups of Velušina-Porodin and Zlastrana in the Early Neolithic, and Trn and Ustie na Drim in the Late Neolithic should be redefined at the very least. The 'culture' of Velušina-Porodin not only includes the Pelagonian plain, but also reaches Lake Ohrid basin and has an apparent relationship with the communities of the Korça basin in Albania and those in the area of the four lakes (Amindeon region) in Greece. The same concerns the Late Neolithic Trn 'cultural group', whose pottery has an identical design at the sites from Ohrid and the Adriatic area to Eastern Anatolia. The concept of 'culture' should therefore be carefully reconsidered in Macedonian archaeology, as well as within the Balkans in general. The local features should be highlighted, but within the networks established by particular societies as the result of a much broader regional dynamism on the level of craft, trade, identity, and religion. The regions of Pelagonia and Lake Ohrid basin should be considered in such terms as their mutual and extensive relationships will become more evident through a thorough study of archaeological material.

## Acknowledgments

I would like to thank Pasko Kuzman and Ljubo Fidanoski for providing photos of unpublished ceramic sherds from Dolno Trnovo.

47 Steadman 1995; Nikolov 1998; Özdoğan 2011; Naumov 2016.

48 Özdoğan et al. 1991; Özdoğan 1993; Öztan / Özkan 2003; Yalman 2006; Bıçakci et al. 2007.

49 Benac 1989.

50 Naumov 2008; 2016.



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